In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1. (original) A compound of formula I, a pharmaceutically acceptable salt thereof, diastereomers, enantiomers, or mixtures thereof:

$$R^{1}O$$
 R^{2}
 R^{2}

wherein

 R^1 and R^3 are, independently, selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^2 is selected from $C_{1\text{-}6}$ alkyl, $C_{2\text{-}6}$ alkenyl, $C_{3\text{-}6}$ cycloalkyl, and $C_{3\text{-}6}$ cycloalkyl- $C_{1\text{-}4}$ alkyl, wherein said $C_{1\text{-}6}$ alkyl, $C_{2\text{-}6}$ alkenyl, $C_{3\text{-}6}$ cycloalkyl, and $C_{3\text{-}6}$ cycloalkyl- $C_{1\text{-}4}$ alkyl are optionally substituted with one or more groups selected from -R, -NO_2, -OR, -Cl, -Br, -l, -F, -CF_3, -C(=O)R, -C(=O)OH, -NH_2, -SH, -NHR, -NR_2, -SR, -SO_3H, -SO_2R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR_2, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen, $C_{3\text{-}6}$ cycloalkyl or $C_{1\text{-}6}$ alkyl.

2. (original) A compound according to claim 1,

wherein R¹ is C₁₋₃alkyl;

R³ is hydrogen; and

 R^2 is selected from C_{1-6} alkyl and C_{3-6} cycloalkyl-methyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl-methyl are optionally substituted with one or more groups selected from methoxy, ethoxy and isopropoxy.

3. (original) A compound according to claim 1,

wherein R¹ is selected from C₁₋₃alkyl and halogenated C₁₋₃alkyl;

 R^3 is selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -NO₂, -CF₃, C_{1-6} alkoxy, chloro, fluoro, bromo, and iodo; and

 R^2 is selected from C_{1-6} alkyl, C_{3-6} cycloalkyl and C_{3-6} cycloalkyl-methyl, wherein said C_{1-6} alkyl, C_{3-6} cycloalkyl and C_{3-6} cycloalkyl-methyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -CF₃, C_{1-6} alkoxy, chloro, fluoro and bromo.

4. (original) A compound according to claim 1,

wherein R¹ is selected from methyl and ethyl;

R³ is hydrogen; and

R² is selected from n-propyl, cyclopropylmethyl, n-pentyl, 2-methoxyethyl, n-butyl, 2-isopropoxyethyl, 2-ethoxyethyl, 3-methoxypropyl, cyclobutylmethyl, methyl, and ethyl.

5. (original) A compound according to claim 1, wherein the compound is selected from:

COMPOUND 1: methyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 2: methyl [3-[[1-(cyclopropylmethyl)-4-piperidinylidene][4-[(diethylamino)carbonyl]phenyl]methyl]phenyl]carbamate;

COMPOUND 3: methyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-pentyl-4-piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 4: ethyl [3-[[4-[(diethylamino)carbonyl]phenyl](1-propyl-4-piperidinylidene)methyl]phenyl]carbamate;

COMPOUND 5: ethyl [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]carbamate;

COMPOUND 6: ethyl [3-[(1-butyl-4-piperidinylidene)[4-

[(diethylamino)carbonyl]phenyl]methyl]phenyl]carbamate;

COMPOUND 7: [3-[[4-[(diethylamino)carbonyl]phenyl][1-[2-(1-methylethoxy)ethyl]-4-piperidinylidene]methyl]phenyl]- carbamic acid, methyl ester;

COMPOUND 8: [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]- carbamic acid, methyl ester;

COMPOUND 9: methyl 3-((1-butylpiperidin-4-ylidene){4-

[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate;

COMPOUND 10: methyl 3-{{4-[(diethylamino)carbonyl]phenyl}[1-(3-methoxypropyl)piperidin-4-ylidene]methyl}phenylcarbamate;

COMPOUND 11: methyl 3-([1-(cyclobutylmethyl)piperidin-4-ylidene]{4-[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate;

COMPOUND 12: methyl 3-[{4-[(diethylamino)carbonyl]phenyl}(1-methylpiperidin-4-ylidene)methyl]phenylcarbamate;

COMPOUND 13: methyl 3-[{4-[(diethylamino)carbonyl]phenyl}(1-ethylpiperidin-4-ylidene)methyl]phenylcarbamate;

COMPOUND 14: ethyl 3-([1-(cyclopropylmethyl)piperidin-4-ylidene]{4-[(diethylamino)carbonyl]phenyl}methyl)phenylcarbamate;

COMPOUND 15: ethyl {3-[{4-[(diethylamino)carbonyl]phenyl}(1-methylpiperidin-4-ylidene)methyl]phenyl}carbamate;

COMPOUND 16: ethyl {3-[[4-(aminocarbonyl)phenyl](1-ethylpiperidin-4-ylidene)methyl]phenyl}carbamate;

COMPOUND 17: [3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]- carbamic acid, methyl ester; and pharmaceutically acceptable salts thereof.

6-7 (cancelled)

- 8. (currently amended) A pharmaceutical composition comprising a compound according to any one of claims 1-5 and a pharmaceutically acceptable carrier.
- 9. (currently amended) A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5.
- 10. (currently amended) A method for the therapy of functional gastrointestinal disorders in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1–5.
- 11. (original) A process for preparing a compound of formula I, comprising:

reacting a compound of formula II with R²-X:

$$R^{1}O$$
 $R^{1}O$
 $R^{2}O$
 $R^{3}O$
 $R^{3}O$
 $R^{4}O$
 R^{4

wherein X is halogen;

 R^1 and R^3 are, independently, selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^2 is selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl.

12. (original) A process for preparing a compound of formula III, comprising:

$$R^4$$

reacting a compound of formula II with R4-CHO:

$$R^{1}O$$

wherein R^1 and R^3 are, independently, selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^4 is selected from $\mathsf{C}_{1\text{-}6}$ alkyl, $\mathsf{C}_{2\text{-}6}$ alkenyl, $\mathsf{C}_{3\text{-}6}$ cycloalkyl, and $\mathsf{C}_{3\text{-}6}$ cycloalkyl- $\mathsf{C}_{1\text{-}4}$ alkyl, wherein said $\mathsf{C}_{1\text{-}6}$ alkyl, $\mathsf{C}_{2\text{-}6}$ alkenyl, $\mathsf{C}_{3\text{-}6}$ cycloalkyl, and $\mathsf{C}_{3\text{-}6}$ cycloalkyl- $\mathsf{C}_{1\text{-}4}$ alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or $\mathsf{C}_{1\text{-}6}$ alkyl.

13. (original) A process for preparing a compound of formula I, comprising:

reacting a compound of formula IV with R¹O-C(=O)-X:

wherein X is halogen;

 R^1 and R^3 are, independently, selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^2 is selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl.

14. (original) A process for preparing a compound of formula IV, comprising:

reacting a compound of formula V with a compound of formula VI or esters thereof:

wherein R^3 is selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from - R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^2 is selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl.

15. (original) A compound of formula IV, a pharmaceutically acceptable salt thereof, diastereomers, enantiomers, or mixtures thereof:

wherein R^3 is selected from hydrogen, C_{1-6} alkyl, and C_{3-6} cycloalkyl, wherein said C_{1-6} alkyl and C_{3-6} cycloalkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl; and

 R^2 is selected from C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -l, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C_{1-6} alkyl.

16. (original) A compound as claimed in claim 15, wherein the compound is selected from 4-[(3-aminophenyl)[1-(2-methoxyethyl)-4-piperidinylidene]methyl]-*N*,*N*-diethyl-benzamide and pharmaceutically acceptable salts thereof.

17. (original) A compound selected from:

[3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-ethoxyethyl)-4-piperidinylidene]methyl]phenyl]-carbamic acid, methyl ester;

methyl 3-{{4-[(diethylamino)carbonyl]phenyl}[1-(3-methoxypropyl)piperidin-4-ylidene]methyl}phenylcarbamate;

[3-[[4-[(diethylamino)carbonyl]phenyl][1-(2-methoxyethyl)-4-piperidinylidene]methyl]phenyl]-carbamic acid, methyl ester; and pharmaceutically acceptable salts thereof.

18. (original) A compound of formula I or pharmaceutically acceptable salts thereof,

wherein R^3 is hydrogen, R^1 is selected from methyl and ethyl; and R^2 is C_{1-3} alkoxy- C_{1-4} alkyl.

19. (new) A method for the therapy of anxiety in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to claim 1.